WHAT IS CLAIMED IS:

1. A positive active material for a rechargeable lithium battery comprising:

a core comprising at least one compound represented by Formula 1; and

an active metal oxide shell formed on the core, the metal oxide being capable of stabilizing a structure of the active material:

Formula 1

$LiA_{1-x-y}B_xC_yO_2$,

where $0 \leq x \leq 0.3$, $0 \leq y \leq 0.01$;

A is an element selected from the group consisting of Co and Mn;

B is an element selected from the group consisting of Ni, Co, Mn, B, Mg, Ca, Sr, Ba, Ti, V, Cr, Fe, Cu and Al; and

C is an element selected from the group consisting of Ni, Co, Mn, B, Mg, Ca, Sr, Ba, Ti, V, Cr, Fe, Cu and Al.

2. The positive active material of claim 1 wherein a metal in the active metal oxide shell is an element selected from the group consisting of Mg, Al, Co, K, Na and Ca.

3. The positive active material of claim 2 wherein the metal in the active metal oxide shell is Al.

4. The positive active material of claim 1 wherein the active metal oxide has an amorphous phase.

5. The positive active material of claim 1 wherein the positive active material is formed of minute particles in an agglomerated state such that a

particle size of the active material is between 0.1 and 100㎛.

6. The positive active material of claim 1 wherein the positive active material is $LiCoO_2$.

7. The positive active material of claim 1 wherein the active metal oxide shell is processed with minute particles of 5-15nm in size.

8. A rechargeable lithium battery comprising a positive active material, the positive active material comprising a core comprising at least one compound represented by Formula 1 and an active metal oxide shell formed on the core, the active metal oxide being capable of stabilizing a structure of the active materials.

Formula 1

$LiA_{1-x-y}B_xC_yO_2$,

where $0 \leq x \leq 0.3$, $0 \leq y \leq 0.01$;

A is an element selected from the group consisting of Co and Mn;

B is an element selected from the group consisting of Ni, Co, Mn, B, Mg, Ca, Sr, Ba, Ti, V, Cr, Fe, Cu and Al; and

C is an element selected from the group consisting of Ni, Co, Mn, B, Mg, Ca, Sr, Ba, Ti, V, Cr, Fe, Cu and Al.

9. The rechargeable lithium battery of claim 8 wherein the metal in the active metal oxide shell is an element selected from the group consisting of Mg, Al, Co, K, Na and Ca.

10. The rechargeable lithium battery of claim 9 wherein a metal in the active metal oxide shell is Al.

11. The rechargeable lithium battery of claim 8 wherein the active

metal oxide has an amorphous phase.

12. A positive active material for a rechargeable lithium battery comprising:

a core comprising $LiCoO_2$; and

an active metal oxide shell formed on the core.

13. The positive active material of claim 12 wherein a metal in the active metal oxide shell is an element selected from the group consisting of Mg, Al, Co, K, Na and Ca.

14. The positive active material of claim 13 wherein the metal in the active metal oxide shell is Al.

15. The positive active material of claim 12 wherein the active metal oxide has an amorphous phase.

16. The positive active material of claim 12 wherein the positive active material is formed of minute particles in an agglomerated state such that a particle size of the active material is between 0.1 and 100㎛.

17. The positive active material of claim 12 wherein the active metal oxide shell is processed with minute particles of 5-15nm in size.

18. A positive active material for a rechargeable lithium battery prepared by producing a crystalline powder or a semi-crystalline powder of Formula 1;

coating the crystalline powder or the semi-crystalline powder with a metal alkoxide suspension; and

heat-treating the coated powder,

the positive active material comprising a core and an active metal oxide

shell formed on the core, the metal oxide being capable of stabilizing the structure of the active material:

Formula 1

$LiA_{1-x-y}B_xC_yO_2$,

where $0 \leq x \leq 0.3$, $0 \leq y \leq 0.01$;

A is an element selected from the group consisting of Co and Mn;

B is an element selected from the group consisting of Ni, Co, Mn, B, Mg, Ca, Sr, Ba, Ti, V, Cr, Fe, Cu and Al; and

C is an element selected from the group consisting of Ni, Co, Mn, B, Mg, Ca, Sr, Ba, Ti, V, Cr, Fe, Cu and Al.

19. The positive active material of claim 18 wherein a metal in the active metal oxide shell is an element selected from the group consisting of Mg, Al, Co, K, Na and Ca.

20. The positive active material of claim 19 wherein the metal in the active metal oxide shell is Al.

21. The positive active material of claim 18 wherein the active metal oxide has an amorphous phase.

22. The positive active material of claim 18 wherein the positive active material is formed of minute particles in an agglomerated state such that a particle size of the active material is between 0.1 and 100㎛.

23. The positive active material of claim 18 wherein the active metal oxide shell is processed with minute particles of 5-15nm in size.

24. A positive active material for a rechargeable lithium battery comprising:

a core comprising $LiCoO_2$; and

an active Al_2O_3 shell formed on the core.

25. The positive active material for a rechargeable lithium battery of claim 24 wherein the active Al_2O_3 has an amorphous phase.

26. The positive active material for a rechargeable lithium battery of claim 24 wherein the positive active material is formed of minute particles in an agglomerated state such that a particle size of the active material is between 0.1 and 100μm.

27. The positive active material of claim 24 wherein the active Al_2O_3 shell is processed with minute particles of 5-15nm in size.